

SYLLABUS

Research methods in Information Systems 7.5 credits D0023E

Forskningsmetoder inom informationssystem

Course syllabus admitted: Autumn 2023 Sp 1 - Present

**DECISION DATE
2023-02-15**

Research methods in Information Systems 7.5 credits D0023E

Forskningsmetoder inom informationssystem

First cycle, D0023E

| Education level | Grade scale | Subject | Subject group (SCB) |
|-----------------|-------------|-----------------|---|
| First cycle | U G VG * | Systemvetenskap | Informatics/Computer and Systems Sciences |

Main field of study

Social Informatics, Information Systems Sciences

Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language and Basic knowledge of systems sciences or social informatics.

Selection

The selection is based on 1-165 credits.

Course Aim

After passing the course, the student should be able to:

Knowledge and understanding

- Describe and apply different research approaches and research methods in the field of information systems

Skills and Abilities

- Search and critically examine scientific literature representative of different science paradigms and of relevance to issues within the discipline of information systems
- Argue for, and choose relevant research method in relation to their own research project
- Design and communicate their research plan (Research Proposal) which shows the application of the parts of the research process

Evaluation ability and approach

- Critically reflect on the consequences of using different research approaches

Contents

This course provides students with the basics of a scientific and a critical approach based on the research methods applied in the scientific discipline of information systems. Within the framework of the course, basic concepts in research methodology as well as different choices of research approaches and research strategies are discussed. In the course, students can analyze various issues and thereby argue for possible choices of research, data collection and analysis methods. Furthermore, students get to practice the ability to plan for their own scientific study which should, based on their own written problematization and purpose, show an account and arguments for selected research approaches and methods.

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

Students take part in lectures and seminars. The course is based on problem-based learning where theoretical knowledge of research methods is mixed with practice. In these seminars, students are trained to discuss and apply research methodology, ie students take part in tasks that they reflect on independently and in dialogue with other students. The students also apply research methodology in their own independent project, which they can carry out individually or in pairs. In this work, the students develop their own research plan which they critically analyze and reflect on. Between meetings, students communicate with teachers and classmates via email, an online learning platform and a web conferencing system. The learning platform is used to make information, course materials and assignments available as well as to handle assignments.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. The students will be assessed both through oral and written examination. In individual assignments, the students' ability to identify and argue for the choice of suitable research approaches and methods for various problems is examined. In the project work, the ability to plan for one's own scientific study based on one's own problematization and purpose is examined, as well as to argue for appropriate research approaches and methods.

The project work examines the ability to design a research study based on an independently identified issue and relevant theoretical areas. This design includes arguments for the choice of research approaches and methods, as well as data collection and analysis methods. Students are also examined in the ability to give a critical reflection on alternative method choices. All included examination parts must be completed for the final grade on the course.

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Course offered by

Department of Computer Science, Electrical and Space Engineering

Modules

| Code | Description | Grade scale | Cr | Status | From period | Title |
|------|-----------------------|-------------|-----|-----------|-------------|-------|
| 0003 | Individual assignment | U G VG * | 4.5 | Mandatory | A19 | |
| 0004 | Project | U G VG * | 3 | Mandatory | A19 | |

Last revised

by Robert Brännström 2023-02-15

Syllabus established

by Jonny Johansson, HUL SRT 2016-02-15